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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,827	08/27/2003	Toshifumi Mihashi	059277-0117	3914

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EXAMINER

LARYEA, LAWRENCE N

ART UNIT	PAPER NUMBER
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3735

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/648,827	Applicant(s) MIHASHI ET AL.	
	Examiner Lawrence N. Laryea	Art Unit 3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it exceeds 150 words.

Correction is required. See MPEP § 608.01(b).

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. Re claims 13,14,15,25,26 and 27, "conversion pitch" was

not disclosed in the specification. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Correction of the following is required

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 1-27 are directed to an eye characteristic measuring apparatus. The aforementioned claims recite the limitations " a first light receiving part, " a second light receiving part," " a measurement condition setting part," and "arithmetic part." No definitive structural limitations to the apparatus are defined in the claims by the term "part." It appears Applicant is attempting to define these elements solely by their function or intended use. However, this may only be accomplished using means-plus-function limitations under 35 USC 112, sixth paragraph. These limitations do not meet the requirements of 35 USC 112, sixth paragraph. Therefore these limitations render the claims indefinite because their respective structure has not been defined in the claims.

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7. The term "low sensitivity" in claims 1,3,10,11,16,22,23, and 28 is a relative term which renders the claim indefinite. The term " low sensitivity " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

8. The term "high sensitivity" in claims 1,3,15,16,27 and 28 is a relative term which renders the claim indefinite. The term " high sensitivity " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

9. Claim 5 recites the limitation "thin beams," at line 3.

There is insufficient antecedent basis for this limitation in the claim.

10. Claim 6 recites the limitation "wide beams," at line 3.

There is insufficient antecedent basis for this limitation in the claim.

11. Claim 17 recites the limitation "thin beams," at line 3.

There is insufficient antecedent basis for this limitation in the claim.

12. Claim18 recites the limitation "wide beams," at line 3.

There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

13. Claims 1-28 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

14. The following is a statement of reasons for the indication of allowable subject matter. The closest prior art is considered to be **Hirohara et al (Pat 6525883)** which discloses a first optical system in which a position change unit changes the positions of the beams transformed by the first transforming member, and an arithmetic unit determines the optical characteristics of the object of measurement based on a first signal from the first light receiving unit corresponding to the angle of inclination of the luminous flux (**Abstract, line 3-19**).

15. **Mihashi et al (US 2002/0041359)** disclose an eye device in which measuring unit (**111**) measures a first light receiving signal from a first light receiving unit (**23**), and measures a cornea topography based on a second light receiving signal from a second light receiving unit (**35**). (**Col.2, Paragraph 0021-0022**)

16. However, **Hirohara et al** and **Mihashi et al** do not expressly disclose a secondary optical system which is used to alter some aspect of the first optical system in which measurement setting and arithmetic conditions are used to examine the fundus.

17. The prior art does not anticipate or render obvious an eye characteristic measuring apparatus including a secondary light receiving mechanism which is used to alter some aspect of first and second light receiving optical systems from which

measurement setting and arithmetic conditions are used to examine the fundus; where the first light receiving optical system has a long focal point and the second light receiving optical system has short focal point.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Youusefi et al (Pat 7036934)** teach that a wavefront sensor can be improved by enhancing the initial focus and precision of light impinging on the retina to determine the higher order aberrations of the eye. A laser is placed into a lower power mode and projects the light onto the retina. A control system can employ data of the light on the retina from the adjustment camera to more precisely focus the imaged spots onto the sensor using "trombone"-type focusing optics. **Molebny et al (Pat 6409345)** teach a first photodetector measures the position of a first portion of the probing beam light scattered back from the retina of the eye to measure aberration refraction of the eye at a plurality of locations. A second photodetector synchronously measures the position of a second portion of the probing beam light reflected back from the cornea of the eye.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence N. Laryea whose telephone number is 571-272-9060. The examiner can normally be reached on 8:30 a.m.-5:30 p.m. EST.

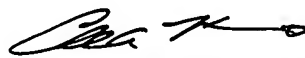
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571-272-4730. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LNL


Charles A. Marmor, II
SPE, Art Unit 3735